



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Kazuhiko MATSUMURA et al. : Docket No. 2003_1003A
Serial No. 10/628,394 : Group Art Unit **Not yet Assigned**
Filed July 29, 2003 : Examiner **Not yet Assigned**

METHOD FOR PRODUCING AN OPTICALLY
ACTIVE β -AMINO ACID

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. .

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**
- (2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and
the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.


4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:

- a. ☐ a full or partial English language translation submitted herewith,

- b. ☐ a foreign patent office search report (in the English language) submitted herewith,
 - c. ☐ the concise explanation contained in the specification of the present application at page,
 - d. ☐ the concise explanation set forth in the attached English language abstract,
 - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Kazuhiko MATSUMURA et al.

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October 20, 2003

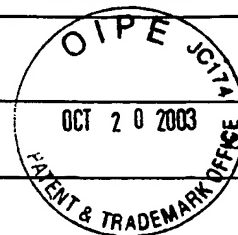
FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: October 20, 2003

ATTY DOCKET NO.
2003_1003ASERIAL NO.
10/628,394APPLICANT
Kazuhiko MATSUMURA et al.FILING DATE
July 29, 2003

GROUP



U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,859,249	1/1999	Seido et al.	546	235	Corresponds to Ref AG
	AB						
	AC						
	AD						
	AE						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AE	99/59721	11/1999	WO				
	AG	10-231286	9/1998	JP				
	AH							
	AI							
	AJ							

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AK	V. SOLOSHONOK et al., "An Enzymatic Entry to Enantiopure β -Amino Acids", SYNLETT, pp. 339-341, May 1993.
	AL	Enantioselective Synthesis of β -Amino Acids, edited by Eusebio Juaristi, Wiley-VCH, New York, pages (v) to (xviii) and pages 1-491 (1997).
	AM	W. LUBELL et al., "Enantioselective Synthesis of β -Amino Acids based on BINAP -Ruthenium(II) Catalyzed Hydrogenation", Tetrahedron: Asymmetry, Vol. 2, No. 7, pp. 543-554, pp. 543-554, 1991.
	AN	K. ACHIWA et al., "Catalytic Asymmetric Synthesis of Optically Active β -Amino Acids", Tetrahedron Letters, No. 13, pp. 1119-1120, 1978.
	AO	Y. ZHOU et al., "Highly Effective Chiral Ortho-Substituted BINAPO Ligands (α -BINAPO): Applications in Ru-Catalyzed Asymmetric Hydrogenations of β -Aryl-Substituted β -(Acylamino)acrylates and β -Keto Esters", J. Am. Chem. Soc., Vol. 124, pp. 4952-4953.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of form with next communication to applicant.